

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.aspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,250	02/14/2001	Kallol Pal	JP920000411US1	1698
75	90 09/25/2003			
ANTHONY ENGLAND			EXAMINER	
1717 WEST SI SUITE 230			KENDALL, CHUCK O	
AUSTIN, TX	/8/03		ART UNIT	PAPER NUMBER
			2122	0,
			DATE MAILED: 09/25/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

~			<				
	Application No.	pplicant(s)					
	09/783,250	PAL ET AL.					
Office Action Summary	Examiner	Art Unit					
	Chuck O Kendall	2122					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a y within the statutory minimum of thi will apply and will expire SIX (6) MO , cause the application to become A	reply be timely filed rty (30) days will be considered timel NTHS from the mailing date of this c BANDONED (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 14	February 2001 .	•					
,— ,	nis action is non-final.						
3)☐ Since this application is in condition for allow							
Disposition of Claims		.2,					
4) Claim(s) is/are pending in the applicati	on.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-45</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers	or.						
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice o	v Summary (PTO-413) Paper No f Informal Patent Application (PT					
J.S. Patent and Trademark Office							

Art Unit: 2122

DETAILED ACTION

- 1. This action is in response to the application filed 02/14/01.
- 2. Claims 1-45 have been examined.

Claim Rejections - 35 USC § 102

- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 4. Claims 1-6,9-15,17-23,25-36 & 38-44 are rejected under 35 U.S.C. 102(e) as being anticipated Rodrigues et al. USPN 6,067,639 (hereinafter Rodrigues).

Regarding claim 1, Rodrigues anticipates a method of testing a program, said method comprising: dividing said program into a plurality of groups, wherein each of said plurality of groups contains a sequence of statements such that a tester can be sure that all the sequence of statements of a group are executed if at least one statement of said group is executed (Rodrigues,15; 54-65); determining a plurality of executed groups when said program is executed while testing said program (fig.7, 706); indicating a plurality of unexecuted groups, wherein said plurality of unexecuted groups are determined based on said determining (13:28-35); and enabling said tester to execute said plurality of unexecuted groups such that said tester can ensure that all statements in said program are executed at least once (13:28-35, also figure 7, 704,706).

Regarding claim 2, the method of claim 1, further comprising including an extra statement in each of said groups, wherein execution of said extra statement enables

Art Unit: 2122

said determining to identify the execution of said extra statement in the corresponding group (15:60-62).

Regarding claim 3, the method of claim 2, wherein said extra statement contains a group identifier, wherein said determining further comprises examining said group identifier to determine the specific group which has been executed (15:60-62, also see 16:1-15).

Regarding claim 4, the method of claim 2, wherein said program is contained in a plurality of programs which in turn are contained in a class of an object oriented environment (16:17-20).

Regarding claim 5, the method of claim 4, further comprising grouping a plurality of sequential groups into a block, and wherein said indicating comprises indicating that said block has been executed only if all groups of the block are executed (9:62-65).

Regarding claim 6, the method of claim 5, wherein said grouping comprises:

determining a language structure present in said plurality of programs (18:12-14);
grouping a subset of groups present in said language structure into a block such
that the statements in said language structure are presented as a block to said
tester(18:12-14).

Regarding claim 9, the method of claim 4, wherein said enabling comprises: enabling said tester to examine the statements associated with said unexecuted blocks such that said tester can determine the arguments which would cause an unexecuted block to be executed; enabling said tester to enter said determined arguments to cause said unexecuted block to be executed (13:28-35, also figure 7, 704,706, for arguments see "Y" and "N").

Regarding claim 10, the method of claim 9, wherein said argument comprises an instance of another object (fig.5, 502).

Regarding claim 11, the method of claim 10, further comprises: enabling said tester to instantiate said instance of said another object (fig.5, 502); enabling said tester to assign a name to said instance, wherein said tester can enter said name to provide said instance as an argument value (13:13-15).

Regarding claim 12, the method of claim 11, further comprising:

Art Unit: 2122

receiving a string as an argument(13:13-15, see name); and determining that said string indicates that said instance is said argument value if said name matches said string(13:13-35).

Regarding claim 13, the method of claim 4, further comprising: enabling said tester to define a macro containing a plurality of program lines (20:33, for macro see script); storing said macro in a database (19:57-60); and enabling said tester to execute said macro in the middle of testing said plurality of programs (20:33, for macro see script).

Regarding claim 14, the method of claim 13, wherein said macro is designed to examine the data structures within an instance of an object or to set the values for the variables in the object (fig.5, 502).

Regarding claim 15, the method of claim 4, wherein said dividing, determining, indicating and enabling are performed in a single computer system (see abstract, for "computer operable method... within a computer application program....").

Regarding claim 17, the method of claim 4, further comprising: enabling said tester to load said class; enabling said tester to instantiate an instance of said class (fig.5, 502); and enabling said tester to execute said program on said instance (fig.5, 504).

Regarding claim 18, (computer program product) see claim 1 for reasoning. Regarding claim 19, (computer program product) see claim 2 for reasoning. Regarding claim 20, (computer program product) see claim 3 for reasoning. Regarding claim 21, (computer program product) see claim 4 for reasoning. Regarding claim 22, (computer program product) see claim 5 for reasoning. Regarding claim 23, (computer program product) see claim 6 for reasoning.

Regarding claim 25, computer program product of claim 21, wherein said enabling means comprises: second enabling means for enabling said tester to examine the statements associated with said unexecuted blocks such that said tester can determine the arguments which would cause an unexecuted block to be executed; third enabling means for enabling said tester to enter said determined arguments to cause said unexecuted block to be executed (13:28-35, also figure 7, 704,706).

Art Unit: 2122

. ,

Regarding claim 26, (computer program product) see claim 11 for reasoning.

Regarding claim 27, (computer program product) see claim 12 for reasoning.

Regarding claim 28, (computer program product) see claim 14 for reasoning.

Regarding claim 29, (computer program product) see claim 13 for reasoning.

Regarding claim 30, (computer program product) see claim 17 for reasoning.

Regarding claim 31, (a system) see claim 1 for reasoning.

Regarding claim 32, (a system) see claim 2 for reasoning.

Regarding claim 33, (a system) see claim 3 for reasoning.

Regarding claim 34, (a system) see claim 4 for reasoning.

Regarding claim 35, (a system) see claim 5 for reasoning.

Regarding claim 36, (a system) see claim 5 for reasoning.

Regarding claim 38, the system of claim 34, wherein said processor receives instructions from said input interface to display the statements associated with said unexecuted blocks, said processor causing the statements to be displayed on said display unit such that said tester can determine the arguments which would cause an unexecuted block to be execute (fig.7, 704,706).

Regarding claim 39, the system of claim 38, wherein said argument comprises an instance of another object (fig.5, 502).

Regarding claim 40, (system) see reasoning in claim 11.

Regarding claim 41, (system) see reasoning in claim 12.

Regarding claim 42, (system) see reasoning in claim 13.

Regarding claim 43, (system) see reasoning in claim 14.

Regarding claim 44, the system of claim 34, wherein said processor loads said class into said RAM in response to receiving an instruction to load said class, said processor further instantiating an instance of said class in response to receiving another instruction, said processor executing said program on said instance in response to receiving one more instruction (Rodrigues, 15:37-40).

Application/Control Number: 09/783,250 Page 6

Art Unit: 2122

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 7,8, 24, 37 & 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues et al. USPN 6,067,639 (hereinafter Rodrigues), as applied in claim 6, in view of Uchihira et al. USPN 5,860,009 (hereinafter Uchihira).

Regarding claim 7, Rodrigues discloses all claimed limitations as applied in claim 6 above. Rodrigues doesn't explicitly disclose wherein said blocks are defined hierarchically according to the inclusive relationship of language structures in said plurality of programs. However, Uchihira does disclose this feature in a similar configuration (25:55-60). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rodrigues and Uchihira because, "Determination of the priority order is performed between processes at the same hierarchical level" (Uchihira, 25:55-60).

Regarding claim 8, the method of claim 7, wherein said language structure comprises one of program delimiters, control structure and loop structure (Rodrigues, 13:5-6).

Regarding claim 24, (computer program product) see claim 7 for reasoning. Regarding claim 37, (system) see claim 7 for reasoning.

Regarding claim 45, the system of claim 31, wherein said input interface is connected to at least one of a mouse and a key-board (Uchihira, 12:11).

Art Unit: 2122

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues et al. USPN 6.067.639 (hereinafter Rodrigues), as applied in claim 4, in view of Grey et al. US 6397378 B1 (hereinafter Grey).

Regarding claim 16, Rodrigues discloses all the claimed limitations as applied in claim 4 above. Rodrigues doesn't explicitly disclose wherein said object is generated in Java Programming language. However, Grey does disclose this functionality (14:62). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rodrigues and Grey because, implementing testing procedures and programming in Java is an old practice and makes the programs more up to date and compatible.

Correspondence Information

8. Any inquires concerning this communication or earlier communications from the examiner should be directed to Chuck O. Kendall who may be reached via telephone at (703) 308-6608. The examiner can normally be reached Monday through Friday between 8:00 A.M. and 5:00 P.M. est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached at (703) 305-4552.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

For facsimile (fax) send to 703-7467239 official and 703-7467240 draft

Chuck O. Kendall

Software Engineer Patent Examiner

TUAN DAM

SUPERVISORY PATENT EXAMINER